



Fermilab

TD-4110

POLICY ON CUTTING AND DRILLING FLOORS IN TECHNICAL DIVISION BUILDINGS

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1.0 Purpose and Scope

The purpose of this policy is to control the hazards associated with the cutting and drilling of floors in Technical Division (TD) buildings. Although slight, there remains a probability that cutting or drilling into an energized electrical conduit in a floor could result in injury or property damage.

2.0 Procedures

2.1 The following procedure applies to all floor cutting in Technical Division buildings.

2.1.1 For any floor cutting, the TD Electrical Coordinator or designated alternate must determine the need for an Electrical Hazard Analysis/Work Permit (FESHM 5042). The TD Electrical Coordinator will review appropriate information to make this determination, including:

- Results of any floor survey conducted by an outside subcontractor. (The TD Electrical Coordinator or designated alternate must be consulted on any floor sweep/survey by an outside subcontractor.)
- Review of the available drawings and blueprints.
- A physical examination of the area.

2.1.2 If the TD Electrical Coordinator or designated alternate deems it necessary after this review, an Electrical Hazard Analysis/Work Permit will be

completed, signed off by the TD Electrical Coordinator or designated alternate, and reviewed with the floor-cutting subcontractor before work begins. The Electrical Hazard Analysis/Work Permit will include a listing of all circuits that must be switched off and/or locked out before floor cutting begins. If shutting off circuits during business hours would create too great an inconvenience, then floor cutting may need to occur during off-hours. Under no circumstances does preventing an inconvenience take precedence over safety.

- 2.1.3 If appropriate, the Facilities Engineering Services Construction Coordinator for the project must be contacted and informed that an Electrical Hazard Analysis/Work Permit has been completed for the floor cutting operation.
- 2.1.4 In those instances where an Electrical Hazard Analysis/Work Permit is completed, this fact must be noted on the construction Project Hazard Analysis (PHA). (Per FESHM 7010, a PHA is required for any project meeting the definition of "construction", which floor cutting does meet.)
- 2.2 The following procedures apply to all floor drilling in Technical Division buildings.
 - 2.2.1 For any floor drilling, the TD ES&H Group must determine the need for an Electrical Hazard Analysis/Work Permit (FESHM 5042). The TD ES&H Group will review appropriate information to make this determination, including:
 - Results of a floor survey conducted by the ES&H Group. (The Technical Specialist from TD ES&H will conduct the floor survey if it is deemed necessary.)
 - Review of the available drawings and blueprints.
 - A physical examination of the area.
 - 2.2.2 If it is deemed necessary by this review, an Electrical Hazard Analysis/Work Permit will be completed, signed by the TD Electrical Coordinator or designated alternate, and reviewed with the employees and/or subcontractors before work begins. The Electrical Hazard Analysis/Work Permit will include a listing of all circuits that must be switched off and/or locked out before floor drilling begins.
 - 2.2.3 In those instances where an Electrical Hazard Analysis/Work Permit is completed for a floor drilling operation, this fact must be noted on the Hazard Analysis if this latter document is required for the project.
 - 2.2.4 The TD Electrical Coordinator or designated alternate must be consulted on any floor survey conducted by an outside subcontractor. Steps 2.2.2 and 2.2.3 of this procedure are applicable when an outside subcontractor performs a floor survey.